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| **Gwangju Institute of Science and Technology**Postdoctoral Researcher Job Description |
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 **[Job Description] Postdoctoral Researcher**

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| Division | Occupation | Researcher | Recruitment field | Postdoctoral Researcher |
| NCSclassifications | 19. Electrical/Electronic | 03. Electronic device development | 06. Semiconductor development | 01. Semiconductor development |
| Institutional Purpose | ○ Cultivating advanced science and technology talent○ Promoting collaborative research with industry and educational research exchanges with foreign countries○ Contributing to national science and technology and balanced regional development |
| Required qualifications | ○ Those who have a doctoral degree (related to semiconductor devices and condensed matter physics) or are scheduled to obtain it in February 2024 |
| Duties performed  | ○ Development and practical implementation of artificial intelligence built-in sensors (miniaturized computational spectrometers) such as device fabrication unit process, sensor manufacturing and characterization, artificial intelligence algorithm supplementation, measurement equipment environment setup, etc. |
| Required knowledge | ○ Advantages/applications of van der Waals heterojunctions, operation principle of computational spectrometers, generation/guidance/detection of monochromatic and broadband light, everyday applications of spectroscopic analysis, etc.○ References[1] https://doi.org/10.1126/science.add8544[2] https://doi.org/10.1038/s41467-024-44702-8[3] https://sites.google.com/view/q-mind-lab |
| Required skills | ○ Experiences in optoelectronic device fabrication and characterization based on two-dimensional materials (including mechanical exfoliation of transition metal dichalcogenides and wet/dry transfer of graphene) or condensed matter physics experiments. |
| Required attitude | ○ Attitude to engage in work proactively and proactively.○ Commitment to compliance with regulations, relevant laws, and standard technical standards.○ Attitude to work sincerely and take responsibility for completing tasks. |
| Basic ability | ○ Communication skills, problem solving skills, resource management skills, interpersonal skills, organizational understanding skills, work ethics |
| Collected information | ○ (Education) Degree acquisition institution, (Experience) Research performance institution, research/paper performance, etc.○ Purpose of collection: Confirmation of job suitability |
| Reference site | www.ncs.go.kr |